1/5

SEQUENCE LISTING

|--|

<120> SPLEEN TYROSINE KINASE CATALYTIC DOMAIN: CRYSTAL STRUCTURE AND BINDING POCKETS THEREOF

<130> MNM/001 PCT

<140> PCT/US03/32812

<141> 2003-10-16

<150> 60/419,382

<151> 2002-10-16

<160> 11

<170> PatentIn Ver. 3.2

<210> 1

<211> 635

<212> PRT

<213> Homo sapiens

<400> 1

Met Ala Ser Ser Gly Met Ala Asp Ser Ala Asn His Leu Pro Phe Phe 1 5 10 15

Phe Gly Asn Ile Thr Arg Glu Glu Ala Glu Asp Tyr Leu Val Gln Gly
20 25 30

Gly Met Ser Asp Gly Leu Tyr Leu Leu Arg Gln Ser Arg Asn Tyr Leu 35 40 45

Gly Phe Ala Leu Ser Val Ala His Gly Arg Lys Ala His His Tyr
50 55 60

Thr Ile Glu Arg Glu Leu Asn Gly Thr Tyr Ala Ile Ala Gly Gly Arg
65 70 75 80

Thr His Ala Ser Pro Ala Asp Leu Cys His Tyr His Ser Gln Glu Ser 85 90 95

Asp Gly Leu Val Cys Leu Leu Lys Lys Pro Phe Asn Arg Pro Gln Gly
100 105 110

Val Gln Pro Lys Thr Gly Pro Phe Glu Asp Leu Lys Glu Asn Leu Ile 115 120 125

Arg Glu Tyr Val Lys Gln Thr Trp Asn Leu Gln Gly Gln Ala Leu Glu 130 135 140

Gln Ala Ile Ile Ser Gln Lys Pro Gln Leu Glu Lys Leu Ile Ala Thr 145 150 155 160

Thr Ala His Glu Lys Met Pro Trp Phe His Gly Lys Ile Ser Arg Glu 165 170 175

Glu Ser Glu Gln Ile Val Leu Ile Gly Ser Lys Thr Asn Gly Lys Phe 180 . 185 . 190

Leu Ile Arg Ala Arg Asp Asn Asn Gly Ser Tyr Ala Leu Cys Leu Leu

195 200 205 His Glu Gly Lys Val Leu His Tyr Arg Ile Asp Lys Asp Lys Thr Gly Lys Leu Ser Ile Pro Glu Gly Lys Lys Phe Asp Thr Leu Trp Gln Leu 230 Val Glu His Tyr Ser Tyr Lys Ala Asp Gly Leu Leu Arg Val Leu Thr Val Pro Cys Gln Lys Ile Gly Thr Gln Gly Asn Val Asn Phe Gly Gly Arg Pro Gln Leu Pro Gly Ser His Pro Ala Thr Trp Ser Ala Gly Gly 280 Ile Ile Ser Arg Ile Lys Ser Tyr Ser Phe Pro Lys Pro Gly His Arg 300 Lys Ser Ser Pro Ala Gln Gly Asn Arg Gln Glu Ser Thr Val Ser Phe Asn Pro Tyr Glu Pro Glu Leu Ala Pro Trp Ala Ala Asp Lys Gly Pro 330 Gln Arg Glu Ala Leu Pro Met Asp Thr Glu Val Tyr Glu Ser Pro Tyr Ala Asp Pro Glu Glu Ile Arg Pro Lys Glu Val Tyr Leu Asp Arg Lys Leu Leu Thr Leu Glu Asp Lys Glu Leu Gly Ser Gly Asn Phe Gly Thr Val Lys Lys Gly Tyr Tyr Gln Met Lys Lys Val Val Lys Thr Val Ala Val Lys Ile Leu Lys Asn Glu Ala Asn Asp Pro Ala Leu Lys Asp Glu 410 Leu Leu Ala Glu Ala Asn Val Met Gln Gln Leu Asp Asn Pro Tyr Ile Val Arg Met Ile Gly Ile Cys Glu Ala Glu Ser Trp Met Leu Val Met Glu Met Ala Glu Leu Gly Pro Leu Asn Lys Tyr Leu Gln Gln Asn Arg His Val Lys Asp Lys Asn Ile Ile Glu Leu Val His Gln Val Ser Met Gly Met Lys Tyr Leu Glu Glu Ser Asn Phe Val His Arg Asp Leu Ala 490 Ala Arg Asn Val Leu Leu Val Thr Gln His Tyr Ala Lys Ile Ser Asp 505 500 Phe Gly Leu Ser Lys Ala Leu Arg Ala Asp Glu Asn Tyr Tyr Lys Ala

Gln Thr His Gly Lys Trp Pro Val Lys Trp Tyr Ala Pro Glu Cys Ile

535

530

540

```
Asn Tyr Tyr Lys Phe Ser Ser Lys Ser Asp Val Trp Ser Phe Gly Val
                    550
                                         555
Leu Met Trp Glu Ala Phe Ser Tyr Gly Gln Lys Pro Tyr Arg Gly Met
Lys Gly Ser Glu Val Thr Ala Met Leu Glu Lys Gly Glu Arg Met Gly
                                585
Cys Pro Ala Gly Cys Pro Arg Glu Met Tyr Asp Leu Met Asn Leu Cys
Trp Thr Tyr Asp Val Glu Asn Arg Pro Gly Phe Ala Ala Val Glu Leu
Arg Leu Arg Asn Tyr Tyr Tyr Asp Val Val Asn
                    630
<210> 2
<211> 8
<212> PRT
<213> Artificial Sequence
<220>
<223> Decsription of Artificial Sequence: Synthetic peptide
<220>
<221> MOD_RES
<222> (1)
<223> NAc-Glu
<220>
<223> c-term amidation
<400>-2
Glu Glu Asp Asp Tyr Glu Ser Pro
<210> 3
<211> 39
<212> DNA
<213> Artificial Sequence
<220>
<223> Decsription of Artificial Sequence: Primer
<400> 3
cgcggatccg ccaccatgga cacagaggtg tacgagagc
                                                                    39
<210> 4
<211> 58
<212> DNA
<213> Artificial Sequence
```

<223> Decsription of Artificial Sequence: Primer

```
<400> 4
cggcggatcc ttaatgatga tgatgatgat ggttcaccac gtcatagtag taattgcg
<210> 5
<211> 8
<212> PRT
<213> Artificial Sequence
<223> Decsription of Artificial Sequence: Synthetic peptide
<400> 5
Glu Glu Asp Asp Tyr Glu Ser Pro
<210> 6
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Decsription of Artificial Sequence: Synthetic peptide
<400> 6
Asp Glu Glu Asp Tyr
<210> 7
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Decsription of Artificial Sequence: Synthetic peptide
<400> 7
Asp Glu Glu Tyr Asp
<210> 8
<211> 5
<212> PRT
<213> Artificial Sequence
<220>
<223> Decsription of Artificial Sequence: Synthetic peptide
<400> 8
Asp Glu Tyr Glu Asp
 1
<210> 9
<211> 5
<212> PRT
<213> Artificial Sequence
```

<220>

```
<223> Decsription of Artificial Sequence: Synthetic peptide
<400> 9
Asp Tyr Glu Glu Val
  1
<210> 10
<211> 5
<212> PRT
<213> Artificial Sequence
<223> Decsription of Artificial Sequence: Synthetic peptide
<220>
<221> MOD RES
<222> (5)
<223> Nle
<400> 10
Tyr Ser Ile Ile Xaa
  1
<210> 11
<211> 26 ...
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Consensus
      sequence
<220>
<221> MOD_RES
<222> (6)..(12)
<223> Variable amino acid
<220>
<221> MOD RES
<222> (14)
<223> Variable amino acid
<220>
<221> MOD RES
<222> (16)
<223> Variable amino acid
<220>
<221> MOD_RES
<222> (20)
<223> Variable amino acid
<400> 11
Asp Phe Gly Trp Ser Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Thr Xaa
                                       10
Cys Gly Thr Xaa Asp Tyr Leu Pro Pro Glu
             20
                                  25
```